

Notice of Allowability

Application No.

09/237,646

Examiner

Cam Y T. Truong

Applicant(s)

CASTELLI ET AL.

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/27/2006.
2. ☒ The allowed claim(s) is/are 1,2,9,10 and 18.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

1. Claims 1-18 are pending in this Office Action.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney Anne Vachon Dougherty on 4/25/2007.

In claims: Please replace claims 1, 9 and 18 with amended claims 1, 9 and 18 and cancel claims 3-8, 11-17.

Art Unit: 2162

1. (currently amended) A computerized method for retrieving multidimensional data from a database in response to a user query, comprising the steps of:

- a. extracting indices from said database;
- b. first searching said database to retrieve said multidimensional data based on said user query, wherein said searching is preceded by retrieving indices to focus said search on indexed information in said database;
- c. presenting retrieved multidimensional data to a user;
- d. receiving user input based on said retrieved multidimensional data;
- e. transforming said database based on said user input to generate a transformed database, wherein said transforming comprises at least one of modifying a linear transform matrix of said database, transforming feature space of the database, changing distance/similarity measures within said database, and changing weighting features within said database;
- f. successively searching said transformed database to retrieve said multidimensional data by applying said extracted indices to said transformed database; and
- g. repeating steps c through f until the user is satisfied with a result of said user query.

9. (currently amended) A program storage device readable by machine, embodying a program of instructions executable by the machine to perform method steps for retrieving multidimensional data from a database in response to a user query, said method steps comprising:

- a. extracting indices from said database;
- b. first searching said database to retrieve said multidimensional data based on said user query, wherein said searching is preceded by retrieving indices to focus said search on indexed information in the database;
- c. presenting retrieved multidimensional data to a user;
- d. receiving user input based on said retrieved data;
- e. transforming said database based on said user input to generate a transformed database, wherein said transforming comprises at least one of modifying a linear transform matrix of said database, transforming feature space of the database, changing distance/similarity measures within said database, and changing weighting features within said database;
- f. successively searching said transformed database to retrieve multidimensional data by applying said extracted indices to said transformed database; and
- g. repeating steps c through f until the user is satisfied with a result of said user query.

Art Unit: 2162

10. (original) The device of Claim 9 wherein said method steps of transforming said database further comprises reformulating the query based on said user input and wherein said searching said transformed database comprises searching said transformed database based on said reformulated query.

18. (currently amended) A system having at least a processor and a memory for retrieving multidimensional data from a database in response to a user query, comprising:

- said memory storing said database;

- a component for extracting indices from said database;

- a search component for first searching said database to retrieve multidimensional data based on said user query, wherein said searching is preceded by retrieving indices to focus said search on indexed information in the database;

- a presentation component for presenting retrieved data to a user;

- a receiver component for receiving user input based on said retrieved multidimensional data; and

- a transformation component for transforming said database based on said user input to generate a transformed database, wherein said transforming comprises at least one of modifying a linear transform matrix of the database, transforming feature space of the database, changing distance/similarity measures within said database, and changing weighting features within said database, wherein said system repeatedly searches said transformed database to retrieve multidimensional data by applying said extracted

Art Unit: 2162

indices to said transformed database and to present retrieved data to the user until the user is satisfied with a result of said user query.

Allowable Subject Matter

3. Claims 1-2, 9-12, and 18 are allowed.


The prior art of record alone or in combination, does not teach or fairly suggest combination steps as recited in claims 1 (method), claim 9 (A program storage device) and claim 18 (system claim), c. wherein presenting retrieved multidimensional data to a user; d. receiving user input based on said retrieved data; e. transforming said database based on said user input to generate a transformed database, wherein said transforming comprises at least one or modifying a linear transform matrix of the database, transforming the feature space of the database, changing distance/similarity measures within said database, and changing weighting features within said database; f. successively searching said transformed database to retrieve multidimensional data by applying said extracted indices to said transformed database; and repeating steps c through f until a result for said query is satisfied by said user.

Contact Information

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cam Y T. Truong whose telephone number is (571) 272-4042. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Cam Y Truong
Primary Examiner
Art Unit 2162